

### **REMARKS**

Applicant respectfully requests reconsideration and allowance of claims 1-10, which are pending in the above-identified application. Claims 1-10 stand rejected. In view of the following discussion, Applicant submits that all pending claims are in condition for allowance.

#### **Rejections Under 35 U.S.C. § 103(a):**

At pages 2-5 of the Office Action, the Examiner has rejected claims 1-7, 9, and 10 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,947,118 (“the ‘118 patent”) in view of U.S. Patent No. 5,871,010 (“the ‘010 patent”) and in further view of U.S. Patent No. 5,472,143 (“the ‘143 patent”). Applicant respectfully traverses the Examiner’s rejection.

Independent claim 1 recites “sloped and/or tapered parabolic-shaped elevations and/or depressions in a repeating pattern of an egg-carton arrangement”. (Emphasis added.)

Applicant respectfully acknowledges the Examiner’s concession that the ‘118 patent does not disclose or suggest elevations and/or depressions as recited in independent claim 1 of the instant application.

The Examiner alleges that it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the device of the ‘118 patent with the depressions taught by the ‘010 patent in order to result in the present invention as claimed in the instant application. The Examiner alleges that the only difference between the indentations of the ‘010 patent and the depressions of the instant application is the shape, and that changing the shape of the indentations/raised areas of the ‘010 patent device from parallel walls to tapered walls involves a mere routine change in shape to one skilled in the art. The Examiner alleges that the indentations and raised areas of the ‘010 patent can be different shapes (see col. 5, lines 40-50). The Examiner alleges that the ‘010 patent teaches decreasing or minimizing contact between the particles and the surface of the ‘010 patent device. The Examiner further alleges that a portion of the specification of the instant application implies that the sloped/tapered shape of the invention is not a critical feature. Applicant respectfully disagrees with the Examiner.

The '010 patent does not disclose or suggest the sloped and/or tapered parabolic-shaped elevations and/or depressions as recited in independent claim 1 of the instant application. Indeed, the raised areas and/or indentations of the '010 patent device are not sloped and/or tapered between the raised areas and indentations. When disclosing a "linear, tortuous, curved [or] circular" configuration in col. 5, lines 40-50, the '010 patent is disclosing the path configuration of the indentations or raised areas, and not the shape of the surface walls of the valleys between the raised areas and/or indentations. As such, the Examiner's conclusion that the '010 patent teaches that the indentations and raised areas can be different shapes is improper.

The Examiner's conclusion that changing the shape of the indentations/raised areas of the '010 patent device from parallel walls to tapered walls involves a mere routine change in shape to one skilled in the art is improper. The '010 patent teaches the opposite configuration where the valley walls between the raised areas and/or indentations are perpendicular, and not sloped and/or tapered parabolic-shaped structures as recited in claim 1 of the instant application. As shown in FIGS. 3A-6C, the '010 patent teaches that the valley walls are perpendicular to the plane of surface and the raised areas and/or indentations. The '010 patent is silent on any sloped and/or tapered structure of the walls of the valleys between the plane of the inhaler surface and the raised areas and/or indentations. Because the raised areas and/or indentations of the '010 patent lack sloped and/or tapering walls, the raised areas and/or indentations of the '010 patent are structurally different from the present invention having "sloped and/or tapered parabolic-shaped" elevations and/or depressions in a repeating pattern of an egg-carton arrangement as recited in independent claim 1 of the instant application. As such, the '010 patent provides no motivation to modify the raised areas and/or indentations to result in the sloped and/or tapered parabolic-shaped elevations and/or depressions as recited in independent claim 1 of the instant application, and the teachings of the '010 patent cannot, and do not, enable a person of ordinary skill in the art to carry out the claimed invention as recited in independent claim 1 of the instant application.

The Examiner's conclusions that (i) the '010 patent device appears to work equally well as sloped and/or tapered parabolic-shaped elevations and/or depressions, and (ii) a portion of the specification of the instant application implies that the sloped/tapered shape of the invention is not a critical feature are improper. The aforementioned structural differences between the '010 patent device and the present invention as recited in independent claim 1 of the instant application are

critical because the structure of the surface walls affects the amount of interaction between the particles and the inhaler surface. As evidence establishing that the Examiner's conclusions are improper, the specification of the instant application as originally filed states unexpected results, and thus the criticality of the claimed structure as recited in independent claim 1 of the instant application. Specifically, from page 5, lines 25-30, the specification of the instant application states:

[s]urprisingly, it has now been found that powder inhalers in which at least part of the inner surfaces which may come into contact with the powder aerosol are provided with a micro- or nano-structured surface, do not have worse delivery characteristics than powder inhalers with a smooth inner surface in these areas. (Emphasis added.)

Moreover, from page 22, lines 1-5, the specification of the instant application states that "[t]he properties of the surfaces thus obtained are optimum when the elevations have rounded tips." (Emphasis added.) Indeed, rounded tips have a sloped/tapered parabolic shape. The statements of the inventor as provided in the specification as originally filed present implications of unexpected results and criticality of the structure of the sloped and/or tapered parabolic-shaped elevations and/or depressions as recited in independent claim 1 of the instant application.

Although Applicant maintains that the '010 patent teaches minimization of contact between particles and the surface of the '010 patent device, for the sake of argument, assuming that the Examiner's conclusion that the '010 patent teaches decreasing, and not just minimizing, the contact between a particle and the surface of the '010 patent device, the Examiner fails to present evidence supporting the conclusion that one skilled in the art would merely modify the shape of the grooves of the '010 patent device to employ the structure as recited in independent claim 1 of the instant application. As established above, no such evidence is apparent from the cited prior art and/or the alleged knowledge of ordinary skill in the art at the time the claimed invention of the instant application was made to support the Examiner's conclusion. As such, Applicant respectfully requests that the Examiner submit an affidavit, additional prior art, or other evidence establishing the subject conclusion.

Without such evidence, Applicant submits that the Examiner is improperly looking to the specification of the instant application for such motivation, and that the Examiner has failed to present a prima facie case of obviousness. Generally, according to MPEP §2142, "[t]he tendency to resort to "hindsight" based upon applicant's disclosure is often difficult to avoid due to the very nature of the examination process." However, according to MPEP §2142, an exception to the

general rule exists where “impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.” (Emphasis added.) When reviewing prior art, the Examiner must take “into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and does not include knowledge gleaned only from applicant’s disclosure.” *In re McLaughlin* 443 F.2d 1392, 1395, 170 USPQ 209, 212 (CCPA 1971) (Emphasis added.). As aforementioned, the Examiner is in fact looking to the disclosure of the instant application for facts and/or motivation rather than to the prior art because the prior art does not contain evidence to support the Examiner’s subject conclusions.

In view of the above, Applicant submits that the ‘010 patent cannot, and does not, cure the aforementioned deficiencies of the ‘118 patent. Because the ‘143 patent lacks any teaching of a sloped and/or tapered parabolic-shaped elevation and/or depression as recited in independent claim 1 of the instant application, the ‘143 patent cannot, and does not, cure the aforementioned deficiencies of the ‘118 and ‘010 patents. As such, the teachings of the ‘118 patent, the ‘010 patent, and the ‘143 patent cannot, and do not, result in the present invention as recited in independent claim 1 of the instant application, and independent claim 1 is patentable. As claims 2-7, 9, and 10 depend from independent claim 1, and recite additional patentable features, claims 2-7, 9, and 10 are, therefore, likewise patentable.

In the Office Action at page 5, the Examiner has rejected claim 8 under 35 U.S.C. §103(a) as being unpatentable over the ‘118 patent, the ‘010 patent, and the ‘143 patent in further view of U.S. Patent No. 4,889,114 (“the ‘114 patent”). The reasons for patentability of independent claim 1, from which claim 8 depends, over the ‘118 patent, the ‘010 patent, and the ‘143 patent as discussed above apply with equal weight to claim 8. Because the ‘114 patent lacks any teaching of a sloped and/or tapered parabolic-shaped elevation and/or depression as recited in independent claim 1 of the instant application, the ‘114 patent does not cure the aforementioned deficiencies regarding independent claim 1, and independent claim 1 is patentable. As claim 8 depends from independent claim 1, and recites additional patentable features, claim 8 is, therefore, likewise patentable.

In view of the above, Applicant respectfully requests that the Examiner’s §103 rejections be withdrawn.

**Conclusion:**

In view of the foregoing, Applicant submits that the instant claims are in condition for allowance. Early and favorable action is earnestly solicited. In the event there are any fees due and owing in connection with this matter, please charge same to our Deposit Account No. 11-0223.

Respectfully submitted,

Dated: March 11, 2009



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1-1447\_Response\_OA-12-16-2009